IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): A protein GCS shown in the following (A) or (B):

(A) a protein having an amino acid sequence shown in SEQ. ID No. 2 in the sequence listing,

(B) a protein consisting of an amino acid sequence comprising substitution, deletion, insertion, addition, or inversion of one or several amino acids in an amino acid sequence shown in SEQ. ID No. 2 in the sequence listing and having a function of enhancing temperature tolerance.

Claim 2 (Original): A DNA of a gene encoding a protein GCS shown in the following (A) or (B):

(A) a protein having an amino acid sequence shown in SEQ. ID No. 2 in the sequence listing,

(B) a protein consisting of an amino acid sequence comprising substitution, deletion, insertion, addition, or inversion of one or several amino acids in an amino acid sequence shown in SEQ. ID No. 2 in the sequence listing and having a function of enhancing temperature tolerance.

Claim 3 (Original): The DNA of a gene according to claim 2, which is a DNA shown in the following (a) or (b):

(a) a DNA that comprises a nucleotide sequence consisting of nucleotides 73 to 1251 within the nucleotide sequence shown in SEQ. ID No. 1 in the sequence listing,

(b) a DNA that hybridizes with a probe comprising a nucleotide sequence consisting of nucleotides 73 to 1251 within the nucleotide sequence shown in SEQ. ID No. 1 in the

sequence listing or a part thereof under a stringent condition, and encodes a protein having a function of enhancing temperature tolerance.

Claim 4 (Currently Amended): A microorganism whose temperature tolerance is enhanced by amplifying the intracellular copy number of the DNA according to claim 2 ~~or 3~~.

Claim 5 (Currently Amended): The microorganism according to claim 4, ~~characterized in that~~ wherein the microorganism is an acetic acid bacterium belonging to the genus Acetobacter or the genus Gluconacetobacter.

Claim 6 (Currently Amended): A method of producing vinegar ~~characterized by~~ comprising culturing a microorganism having alcohol oxidation ability among the microorganisms according to claim 4 ~~or 5~~ in a medium ~~containing~~ comprising alcohol, whereby acetic acid is produced and accumulated in the medium even at a high culture temperature.

Claim 7 (Currently Amended): A recombinant plasmid pUCGCS (FERM BP-8217) ~~including~~ comprising at least the DNA according to claim 2 ~~or 3~~.